Apter Power

PanelView Plus 6 Specifications

Catalog Numbers 2711P-K7C4Dx, 2711P-T7C4Dx, 2711P-B7C4Dx, 2711P-K7C4Ax, 2711P-T7C4Ax, 2711P-B7C4Ax, 2711P-K10C4Dx, 2711P-T10C4Dx, 2711P-B10C4Dx, 2711P-K10C4Ax, 2711P-T10C4Ax, 2711P-B10C4Ax, 2711P-K12C4Dx, 2711P-T12C4Dx, 2711P-B12C4Dx, 2711P-K12C4Ax, 2711P-T12C4Ax, 2711P-B12C4Ax, 2711P-K15C4Dx, 2711P-T15C4Dx, 2711P-B15C4Dx, 2711P-K15C4Ax, 2711P-T15C4Ax, 2711P-B15C4Ax, 2711P-K4M5A8, 2711P-K4M5D8, 2711P-K4M20A8, 2711P-K4M20D8, 2711P-K4C5A8, 2711P-B4C5A8, 2711P-K4C5D8, 2711P-B4C5D8, 2711P-K4C20A8, 2711P-B4C20A8, 2711P-K4C20D8, 2711P-B4C20D8, 2711P-K6M5A8, 2711P-T6M5A8, 2711P-B6M5A8, 2711P-K6M5D8, 2711P-T6M5D8, 2711P-B6M5D8, 2711P-K6M20A8, 2711P-T6M20A8, 2711P-B6M20A8, 2711P-K6M20D8, 2711P-T6M20D8, 2711P-B6M20D8, 2711P-K6C5Ax, 2711P-T6C5Ax, 2711P-B6C5Ax, 2711P-K6C5Dx, 2711P-T6C5Dx, 2711P-B6C5Dx, 2711P-K6C20Ax, 2711P-T6C20Ax, 2711P-B6C20Ax, 2711P-K6C20Dx, 2711P-T6C20Dx, 2711P-B6C20Dx, 2711PC-K4M20D8, 2711PC-B4C20D8, 2711PC-T6M20D8, 2711PC-T6C20D8, 2711PC-T10C4D8

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PanelView™ Plus 6 terminals are used for applications with a need to monitor, control, and display information graphically, allowing operators to quickly understand the status of their application. All PanelView Plus 6 applications are programmed with FactoryTalk® View Studio for Machine Edition (ME) software and have FactoryTalk View ME Station (runtime) software that is installed on each terminal.

This family provides a broad range of rugged terminals that provide these features:

- Premier integration with the Integrated Architecture™ platform
- Scalable 4-inch to 15-inch displays with touch screen, keypad, or both for input
- Common development software
- Real-time monitoring of a terminal's displays via a web browser (7-inch to 15-inch displays)

Use this document along with the Visualization Solutions Selection Guide, publication VIEW-SG001, to make decisions on the visualization solutions that are best suited for your system requirements.

Summary of Changes

This publication contains new and updated information as indicated in the following table.

Topic	Pages
Updated the power supply catalog number.	Throughout
Updated the Vibration line in the Environmental Specifications table for the power supply.	12
Updated the Technical Specifications and Dimensions tables for the power supply.	13
Added catalog numbers for the new SDHC cards.	4…4

Environmental Specifications

The environmental certifications in Table 1 apply to these PanelView Plus 6 terminals:

- PanelView Plus 6 - 700...1500 terminals including logic, communication modules, and display modules
- PanelView Plus 6 - 400 and 600 terminals
- PanelView Plus 6 Compact 400, 600, and 1000 terminals

Table 1 - Environmental Specifications - PanelView Plus 6 Terminals

Attribute	2711P, 2711PC
Temperature, operating	0…55 °C (32…131 °F)
Temperature, nonoperating	-25…+70 °C (-13…+158 °F)
Heat dissipation 400, 600 700, 1000, 1250, 1500	 85 BTU/hr 240 BTU /hr
Relative humidity	5…95% noncondensing (5…90% noncondensing only for low reflective terminal, catalog number 2711P-B4C20D8-LR)
Vibration	10…57 Hz, 0.012 peak-to-peak displacement 57…500 Hz, 2 g peak acceleration
Altitude, operating	2000 m (6561 ft)
Shock, operating	15 g at 11 ms
Shock, nonoperating	30 g at 11 ms
Enclosure ratings 400 and 600 700…1500	 NEMA/UL Type 12, 13, 4X (indoor use only), and IEC IP66 NEMA/UL Type 12, 13, 4X (indoor use only)(1), and IEC IP54, IP65
Airborne contaminants	For PanelView Plus 6 conformal-coated PCBA level products with catalog numbers that end in K, these specifications apply: ANSI/ISA S71.04 - 1985 Severity Level G3 EN60654-4: 1998 Class 3

(1) The 2711P-RDT12H is rated for NEMA 4x Outdoor use.

PanelView Plus 6 - 400 and 600 Terminals

The next generation PanelView Plus 6 - 400 and 600 terminals combine the display, logic, communication, and power into one base unit:

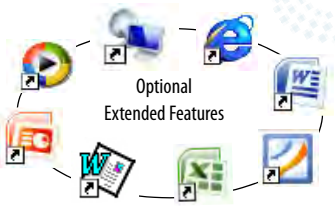
- The 400 model has a 3.5-in. color graphic display with keypad or combination key and touch input, or a grayscale display with keypad input.
- The 600 model has a 5.7-in. color or grayscale graphic display with keypad, touch screen, or combination keypad/touch-screen input.



For a complete listing of catalog number selections, refer to the Visualization Solutions Selection Guide, publication VIEW-SG001.

This new generation of terminals runs Windows CE 6.0 operating system similar to the 700...1500 terminals. The terminals run HMI applications but they also provide the ability to access the desktop. For users with more complex application requirements, the 600 color terminals can be ordered with optional, extended features and file viewers.

Table 6 - Terminal Features

Features	Description
High memory capacity	256 MB RAM, 512 MB nonvolatile memory (approx. 73 MB free user memory)
Power input	AC or DC
Communication ports	Units are available with one of these communication options: • RS-232 • Ethernet and RS-232 Separate communication modules are not supported.
USB ports	• 1 USB host ports for connecting a USB mouse, keyboard, printer, and USB flash drives that are hot swappable • 1 USB device port for connecting a host personal computer
Secure Digital (SD) card slot	Hot-swappable card slot supports 1784-SD*x* SD cards for transferring files, upgrading firmware, or logging data
Operating system 	All terminals run the Windows CE 6.0 operating system (OS) providing OS functionality that is needed for most users needs: • FTP server • VNC client/server • PDF reader • Active X controls • Third-party device support Additional functionality is available for the 600 terminals by ordering terminals with these optional, extended features: • Internet Explorer web browser • Media player • Microsoft file viewers for PowerPoint, Excel, and Word • WordPad text editor
FactoryTalk View software	• FactoryTalk View Machine Edition runtime, version 6.10 or later, is preloaded and activated on each terminal • HMI applications are developed with FactoryTalk View Studio for Machine Edition software, which is purchased separately
Reset and default switches	Provide easy access to diagnostic and repair operations

Technical Specifications

Table 7 provides technical specifications for PanelView Plus 6 - 400 and 600 terminals.

Table 7 - Technical Specifications - PanelView Plus 6 - 400 and 600 Terminals

Attribute	400 Grayscale 2711P-K4M5A8, 2711P-K4M5D8, 2711P-K4M20A8, 2711P-K4M20D8	400 Color 2711P-K4C5A8, 2711P-B4C5A8, 2711P-K4C5D8, 2711P-B4C5D8, 2711P-K4C20A8, 2711P-B4C20A8, 2711P-K4C20D8, 2711P-B4C20D8	600 Grayscale 2711P-K6M5A8, 2711P-T6M5A8, 2711P-B6M5A8, 2711P-K6M5D8, 2711P-T6M5D8, 2711P-B6M5D8, 2711P-K6M20A8, 2711P-T6M20A8, 2711P-B6M20A8, 2711P-K6M20D8, 2711P-T6M20D8, 2711P-B6M20D8	600 Color [1] 2711P-K6C5A*x*, 2711P-T6C5A*x*, 2711P-B6C5A*x*, 2711P-K6C5D*x*, 2711P-T6C5D*x*, 2711P-B6C5D*x*, 2711P-K6C20A*x*, 2711P-T6C20A*x*, 2711P-B6C20A*x*, 2711P-K6C20D*x*, 2711P-T6C20D*x*, 2711P-B6C20D*x*
Operator input	Keypad	Keypad or keypad/touch	Keypad, touch, or keypad/touch	Keypad, touch, or keypad/touch
Display type	Grayscale TFT LCD	Color active-matrix TFT	Grayscale TFT LCD	Color active-matrix TFT
Display size	3.5 in.	3.5 in.	5.7 in.	
Display area (WxH)	70 x 53 mm (2.8 x 2.3 in.)	70 x 53 mm (2.8 x 2.3 in.)	115 x 86 mm (4.5 x 3.4 in.)	115 x 86 mm (4.5 x 3.4 in.)
Resolution	320 x 240, 16-levels gray	320 x 240, 18-bit color graphics	320 x 240, 16-levels gray	320 x 240, 18-bit color graphics
Brightness	320 cd/m^2 (Nits)	320 cd/m^2 (Nits)	440 cd/m^2 (Nits)	440 cd/m^2 (Nits)
Backlight	White LED, not replaceable; 25,000 hours min at 25 °C (77 °F)		White LED, not replaceable; 25,000 hours min at 25 °C (77 °F)	
Touch screen	—	• Analog resistive, 4-wire • Actuation: 1 million presses • Operating force: 10…110 g	• Analog resistive, 4-wire • Actuation: 1 million presses • Operating force: 10…110 g	
Keypad description	• Stainless-steel membrane • Numeric, navigation, and function keys • Actuation: 1 million presses; operating force: 340 g		• Stainless-steel membrane • Numeric, navigation, and function keys • Actuation: 1 million presses; operating force: 340 g	
Keypad function keys	8 function keys (F1…F8)		10 function keys (F1…F10)	
Battery (real-time clock)	Battery-backed clock timestamps critical data, accuracy is ±2 minutes per month Battery life: 4 year min at 25 °C (77 °F) Field-replaceable: cat. no. 2711P-RY2032 or equivalent CR2032 coin-cell lithium battery			
System memory	256 MB RAM, 512 MB nonvolatile memory (approx. 73 MB free user memory)			
External storage	Secure Digital (SD) card, cat. no.1784-SDx, supported by hot-swappable SD card slot USB flash drive that is supported by high-speed, hot-swappable, 2.0 USB host port			
Operating system	Windows CE 6.0 operating system with or without extended features and Microsoft Office file viewers			Windows CE 6.0 operating system with extended features/file viewers
Software	FactoryTalk View Machine Edition software, version 6.10 or later; FactoryTalk ViewPoint software is not supported on the 400 and 600 terminals.			
Communication ports	• RS-232, 1 USB host, 1 USB device port (catalog numbers with the number 5, for example, 2711P-B4C5D8) • Ethernet (10/100 Mbps, Auto-MDI/MDI-X), RS-232, 1 USB host, 1 USB device port (catalog numbers with the number 20, for example, 2711P-B4C20D8)			
Input voltage, DC	18…30V DC (24V DC nom); Requires the use of a Class 2 or safety extra low voltage (SELV) or protected extra-low voltage (PELV) power supply			
Power consumption, DC	15 W max (0.6 A at 24V DC), 9 W typical (0.375 A at 24V DC)			
Recommended external power supply	Cat. no. 1606-XLE120E, SELV or PELV isolated power supply for non-isolated 400 and 600 DC-powered terminals; 100…240V AC, 250VA max			
Input voltage, AC	100…240V AC, 50…60 Hz			
Power consumption, AC	35VA max, 20VA typical			
Weight, approx	Keypad: 473 g (1.04 lb) Touch: —		Keypad: 728 g (1.60 lb) Touch: 594 g (1.31 lb)	
Dimensions (HxWxD), approx Without AC module With AC module Without AC module With AC module	Keypad: 152 x 185 x 60 mm (6.0 x 7.28 x 2.35in.) 152 x 185 x 90 mm (6.0 x 7.28 x 3.54 in.) Touch:— —		Keypad: 167 x 266 x 68 mm (6.58 x 10.47 x 2.68 in.) 167 x 266 x 98 mm (6.58 x 10.47 x 3.86 in.) Touch: 152 x 185 x 68 mm (6.0 x 7.28 x 2.68 in.) 152 x 185 x 98 mm (6.0 x 7.28 x 3.86 in.)	
Cutout dimensions (HxW)	Keypad: 123 x 156 mm (4.86 x 6.15 in.) Touch: —		Keypad: 142 x 241 mm (5.61 x 9.50 in.) Touch:123 x 156 mm (4.86 x 6.15 in.)	

(1) Replace *x* in the catalog number with an 8 or 9. For catalog numbers ending in 9, for example, 2711P-T6C20D9, the Windows CE operating system includes extended features and Microsoft Office file viewers; catalog numbers ending in 8, for example, cat. not. 2711P-T6C20D8, do not support extended features and file viewers.

Terminal Dimensions

Table 8 provides overall dimensions and cutout dimensions for the PanelView Plus 6 - 400 and 600 terminals.

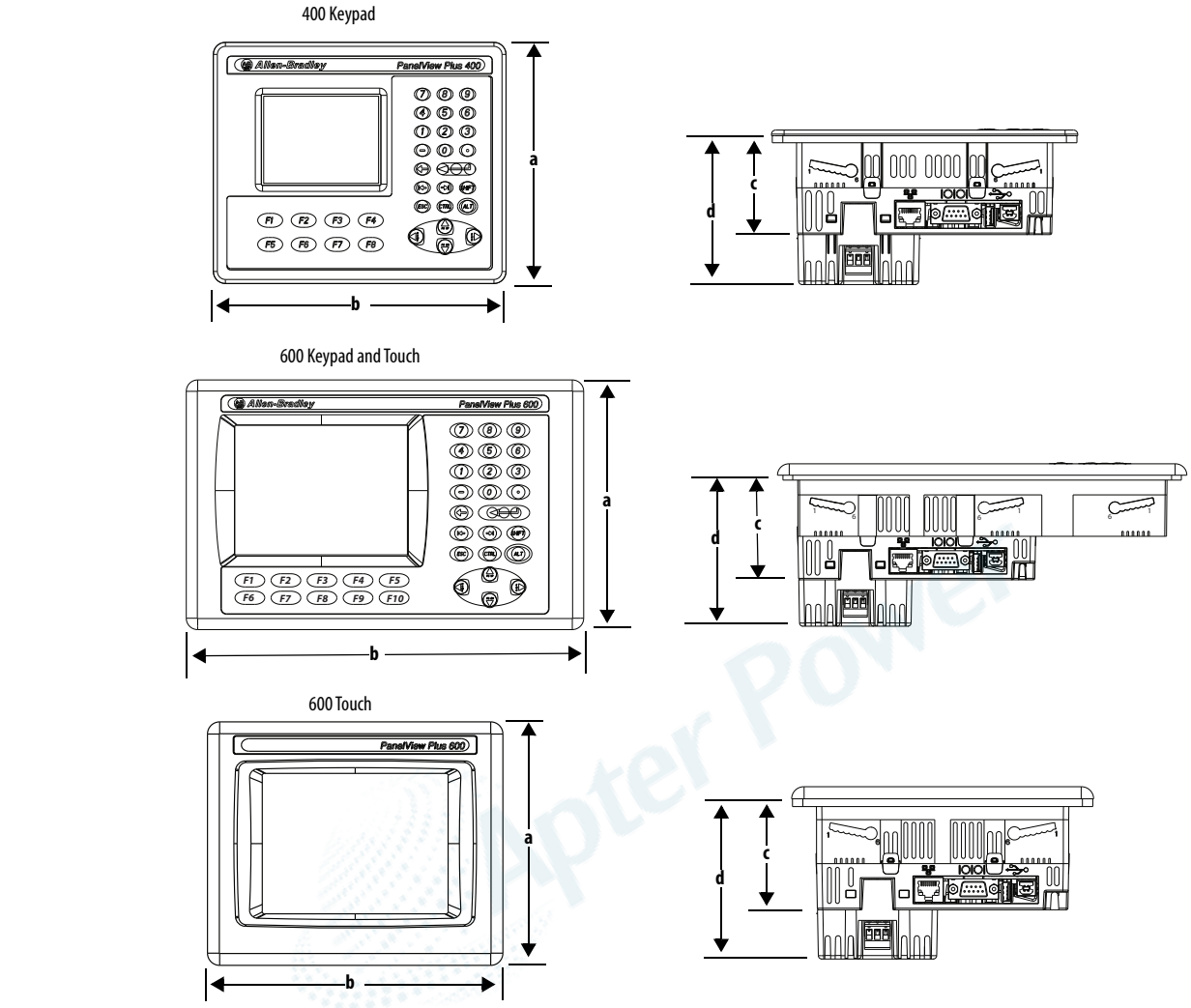


Table 8 - PanelView Plus 6 - 400 and 600 Product Dimensions

Terminal	Input Type	Height (a) mm (in.)	Width (b) mm (in.)	Depth (c) mm (in.)	Depth (d) with AC module mm (in.)	Panel Cutout Width mm (in.)	Panel Cutout Height mm (in.)
400	Keypad or keypad/touch	152 (6.0)	185 (7.28)	60 (2.35)	90 (3.54)	156 (6.15)	123 (4.86)
600	Keypad or keypad/touch	167 (6.58)	266 (10.47)	68 (2.68)	98 (3.86)	241 (9.50)	142 (5.61)
	Touch	152 (6.0)	185 (7.28)	68 (2.68)	98 (3.86)	156 (6.15)	123 (4.86)